Panasonic Broadcast

AV-HS300G
Menu Information

3. Setup

3-1. Setting the input signals

3-1-1. Setting the input signals (IN 1 to 5)

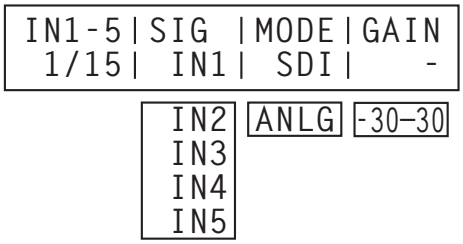
If HD has been selected as the system format, SDI or analog HD component can be selected for each input.
This selection is possible only when the HD analog board has been connected.

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the IN1 to 5 menu.

③ Turn [F2], select the input signals using the SIG item, turn [F3], and select SDI or ANLG (analog HD component) using the MODE item.

④ If analog HD component has been selected, turn [F4], and set the gain of the input signals using the GAIN item. The gain can be set within the ±30-step range, and the setting will result in changes of ±2 dB. The amount by which the gain changes per step is not the same for each step.



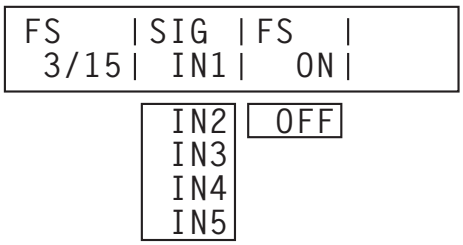
3-1-2. Setting the input signal frame synchronizer

The frame synchronizer can be set to ON or OFF for each input.
The input 6 (DVI input) frame synchronizer is permanently ON. It cannot be set from ON to OFF or vice versa.

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the FS menu.

③ Turn [F2], select the input signals using the SIG item, turn [F3], and select ON or OFF for the frame synchronizer using the FS item.



AVDL function is active while the frame synchronizer function is set to OFF.
The AVDL function automatically adjusts the input image signal phase to the horizontal synchronization reference signal phase.
For details, refer to “3-6. Adjusting the output signal phase”.

3. Setup

3-1-3. Setting the DVI input signals (IN6)

■Selecting the signal system

Select the digital or analog system for the DVI input video signals.

DIG (digital): Digital input signals of the DVI connector are effective.

ANLG (analog): Analog input signals of the DVI connector are effective.

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the DVIIN menu.

③ Turn [F2], and select the signal system using the MODE item.

■Selecting the scaling method

XGA or SXGA can be input as the size. The frequency is fixed at 60 Hz.

NORM (normal): The size of the input images is increased or reduced while keeping their aspect ratio the same.

FULL (full): The size of the input images is increased or reduced in accordance with the system resolution. (The aspect ratio of the input images is not kept the same. The rate at which the image size is increased or reduced in the vertical direction and in the horizontal direction differs.)

On the DVIIN menu, turn [F3], and select the scaling method using the SCAL item.

<DVI input scaling size table>

DVI format	Mode	HD/1080i 1920 × 1080	HD/720P 1280 × 720	SD/NTSC*1 720 × 480	SD/PAL*2 720 × 576
XGA **1024 × 768**	NORM	1440 1080	960 720	720 480	720 576
	FULL	1920 1080	1280 720	720 480	720 576
SXGA **1280 × 1024**	NORM	1350 1080	900 720	675 480	675 576
	FULL	1920 1080	1280 720	720 480	720 576

***1: 480/59.94i, *2: 576/50i**

3. Setup

■Adjustment

Adjust the clock/phase and position of the DVI input signals.

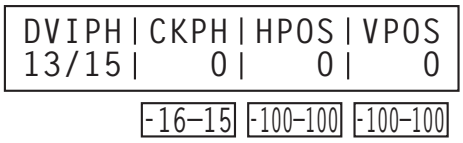
① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the DVIPH menu.

③ Turn [F2] to adjust the clock/phase of the analog input signal using the CKPH item.
Adjust this setting so that the noise will be minimum level.

④ Turn [F3] to adjust the horizontal position using the HPOS item.

⑤ Turn [F4] to adjust the vertical position using the VPOS item.



3. Setup

3-2. Setting the output signals

3-2-1. Types of output signals

There are three output signal types: PGM, PVW and AUX.

PGM: This is the main-line output of the switcher; images with wipe, mix, key and other effects added to them are output.

PVW: This is the preview output which enables the next operation to be checked in advance.

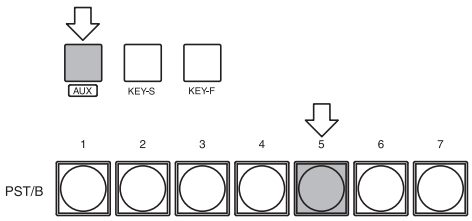
AUX: Signals selected by the AUX bus are output.

3-2-2. Selecting the AUX signals

One of the crosspoints 1 to 7, PGM, PVW or CLN signals can be selected for the AUX bus.

To select a crosspoint signal, press one of the B crosspoint switches 1 to 7 while holding down the [AUX] switch. The indicator of the selected switch lights (in amber), and the images are switched.

To select PGM, PVW or CLN signals, press one of the wipe pattern selector switches while holding down the [AUX] switch. The indicator of the selected switch lights (in amber), and the images are switched.



When CLN signals have been selected, images with the key signals removed from the PGM signals are output.

3. Setup

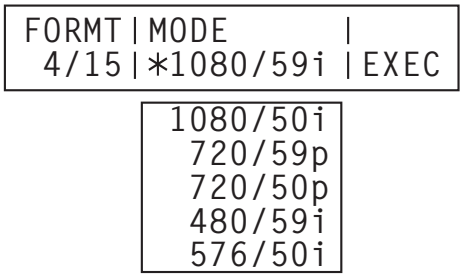
3-3. Selecting the video format

One system (input/output signal) video format can be selected. More than one format cannot be selected.
If HD is selected, SDI or HD analog component can be selected for each input. (See 3-1-1)

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the FORMT menu.

③ Turn [F2], select the format using the MODE item, and press the [F4] switch (EXEC) to enter the selection. An asterisk (∗) appears at the left of the format currently selected.



Display	HD/SD	Signal format	Input signals
1080/59i	HD	1080/59.94i	SDI / analog HD component
1080/50i	HD	1080/50i	SDI / analog HD component
720/59p	HD	720/59.94p	SDI / analog HD component
720/50p	HD	720/50p	SDI / analog HD component
480/59i	SD	480/59.94i	SDI
576/50i	SD	576/50i	SDI

3-4. Setting the crosspoints

3-4-1. Assigning signals to the crosspoints

External video input signals and internally generated signals can be assigned to crosspoint switches 1 to 7.

■Displaying the assignment statuses

① Press the [FUNC] switch to light its indicator, and then press the [XPT] switch to display the XPT menu.

② The XPTAS (1/3) menu appears first, and the assignment statuses are displayed. The names of the assigned signals are abbreviated on the display.

```
XPTAS| SIG: B12345D
 1/3 | XPT: 1234567
```

When one of the crosspoint switches 1 to 7 is held down for a long time, the name of the signal assigned is displayed on the LCD while the button is held down.
Example: When crosspoint switch 1 is pressed (when the black signal has been assigned to this switch).

```
XPTAS| SIG: BLK
     | XPT: 1
```

■Assigning signals to the crosspoints

① Press the [FUNC] switch to light its indicator, and then press the [XPT] switch to display the XPT menu.

② Turn [F1] to display the XPTAS (2/3) menu.

③ Turn [F2], select the crosspoint switch using the XPT item, turn [F3] and select the input signal using the SIG item.

```
XPTAS|XPT |SIG |
 2/3 |   1| IN1|
```

```
   2  IN2
   3  IN3
   4  IN4
   5  IN5
   6  DVI
   7  BLK
     CBGD
     CBAR
     FMEM
```

The table below lists the materials which can be assigned.

Switch	Signal	Abbreviation		Description
XP1 to 7	INPUT1 to 5	IN1 to 5	1 to 5	SDI or analog HD component
	DVIIN	DVI	D	DVI-I input
	BLACK	BLK	B	Internally generated signal, black
	COLOR BACKGROUND	CBGD	G	Internally generated signal, color background (matte)
	COLOR BAR	CBAR	C	Internally generated signal, color bar
	FRAME MEMORY	FMEM	F	Frame memory image

The table below lists the default settings.

Switch	Signal	Description
XP1	BLACK	Internally generated signal, black
XP2	INPUT1	External video input 1: SDI or analog HD component
XP3	INPUT2	External video input 2: SDI or analog HD component
XP4	INPUT3	External video input 3: SDI or analog HD component
XP5	INPUT4	External video input 4: SDI or analog HD component
XP6	INPUT5	External video input 5: SDI or analog HD component
XP7	DVIIN	External video input 6: DVI-I input

3-4-2. Setting the crosspoint switching

The timing at which the crosspoints are to be switched can be set.

ANY: The crosspoints are switched in the nearest field. This is suited to live applications.

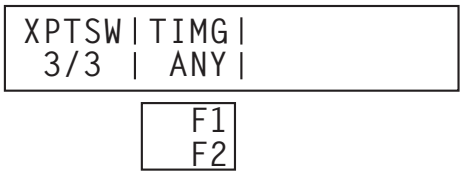
F1: The crosspoints are switched in field 1. This is suited to editing applications.

F2: The crosspoints are switched in field 2. This is suited to editing applications.

① Press the [FUNC] switch to light its indicator, and then press the [XPT] switch to display the XPT menu.

② Turn [F1] to display the XPTSW menu.

③ Turn [F2], and select the switching timing using the TIMG item.



3. Setup

3-5. Setting the sync signals

The sync signals to be used by the system can be selected.

External sync: For synchronization with an external sync signal (gen-lock). The reference input signal is looped through and output.

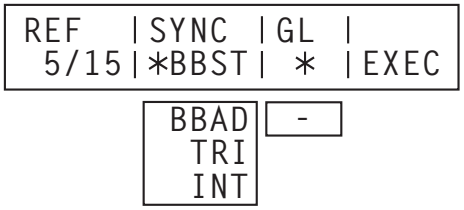
- **BBST**: Black burst signal (vertical phase of 0H)
- **BBAD**: Black burst signal
  This can be selected when HD format signals are supplied.
  (Vertical phase of 90H when the 59.94i or 59.94p format is selected;
  vertical phase of 75H when the 50i or 50p format is selected)
- **TRI**: Tri-level sync signal (vertical phase of 0H)
  This can be selected when HD format signals are supplied.

Internal sync: For synchronization with an internal reference signal (INT). The REFOUT signal (black burst signal) is output from the two reference connectors.

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the REF menu.

③ Turn [F2], select the sync signal using the SYNC item, and press the [F4] switch (EXEC) to enter the selection.
An asterisk (∗) appears at the left of the reference signal currently selected.



An asterisk (∗) appears at the GL item when operation is synchronized with the external or internal sync signals.

A dash (–) appears at the GL item when operation is not synchronized with the external or internal sync signals.

3-6. Adjusting the output signal phase

The phase of the output video signals can be adjusted.

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

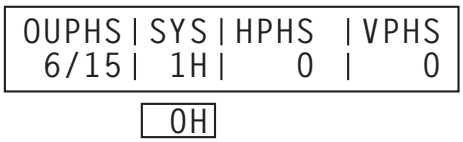
② Turn [F1] to display the OUPHS menu.

③ Turn [F2], and select 0H or 1H using the SYS item.

0H: The output video signals are output to the system REF signal with using in-phase. The frame synchronizer function is ON for all input signals.

1H: The output video signals are output to the system REF signal with 1H delay.

④ Turn [F3] to adjust H phase using the HPHS item, and turn [F4] to adjust V phase using the VPHS item. HPHS can be adjusted within a range of –0.5H to +0.5H and VPHS within a range of –100H to +100H.

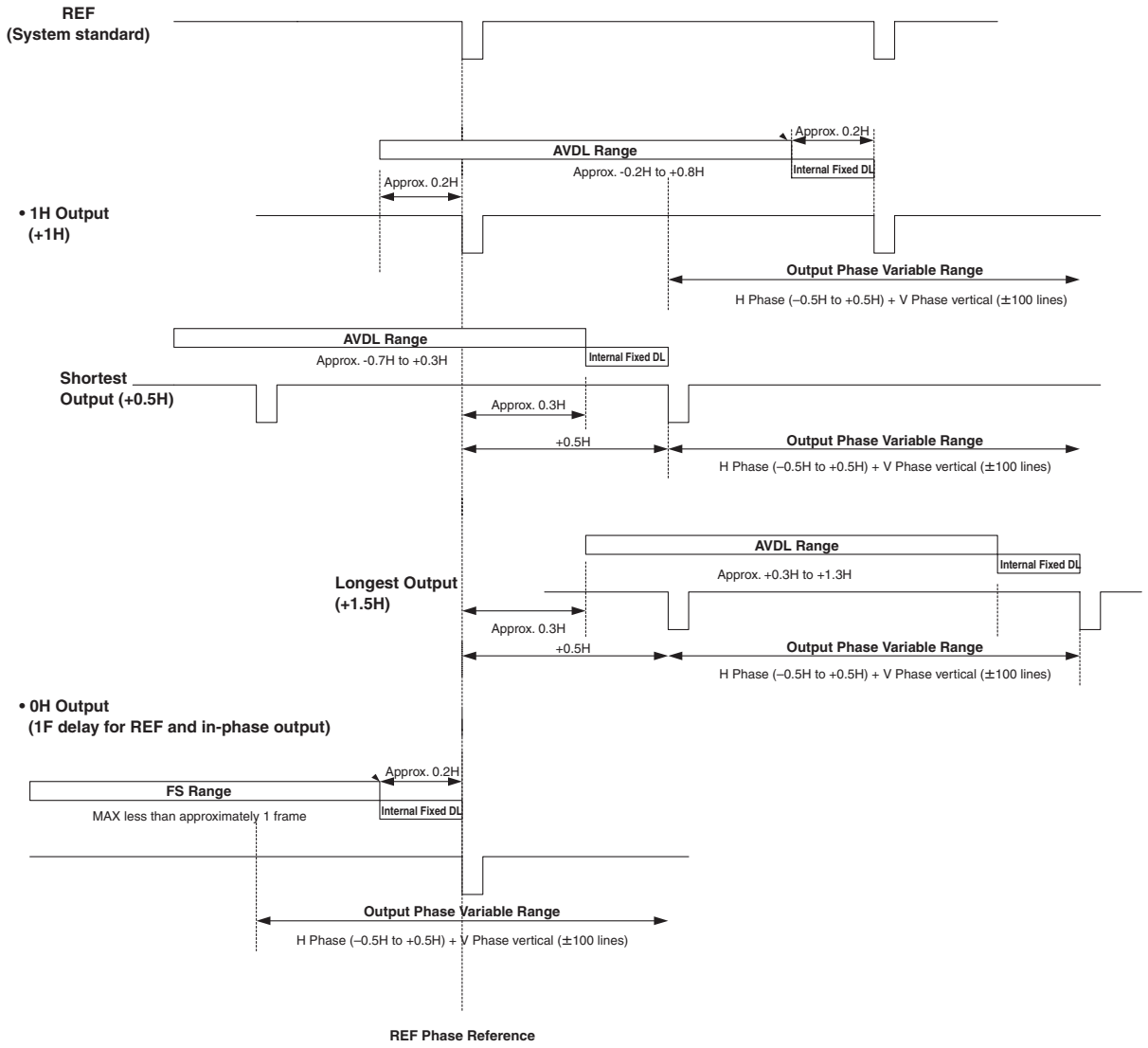


Output video signal phase adjustment

Phase	Video format	Adjustment range
HPHASE	1080i/59i	–1100 to 1099
	1080/50i	–1320 to 1319
	720/59p	–825 to 824
	720/50p	–990 to 989
	480/59i	–429 to 428
	576/50i	–432 to 431
VPHASE	Same for all formats	–100 to 100

3. Setup

<Phase adjustment setup>



AVDL Range: Range for automatic phase adjustment.

3. Setup

3-7. Network settings

Set up the network for transmitting image files by Ethernet. For details on image transmission method, refer to “5. Image transmission functions”.
The network initial setup is: IP address: 192.168.0.10, subnet mask: 255.255.255.0 and gateway: 0.0.0.0 (unused). When using the host computer with settings matching the network setup, it is not necessary to setup via the menu.

For the setting to take effect, the system must be rebooted. Turn the system’s power off and then back on.

■Setting the IP address

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the IP menu.

③ Turn [F2] to select the setting location. An asterisk (∗) appears at the setting location.

④ Turn [F3] to set the number, and press the [F3] switch to enter the setting. If the setting is not entered even though it has been changed, “ ! ” appears above the setting location, and when the setting location is moved by turning [F2], the value prior to the change is restored.

```
IP   | !∗
7/15|192.168.  0. 10
```

■Setting the subnet mask

① On the SETUP menu, turn [F1] to display the MASK menu.

② Turn [F2] to select the setting location. An asterisk (∗) appears at the setting location.

③ Turn [F3] to set the number, and press the [F3] switch to enter the setting. If the setting is not entered even though it has been changed, “ ! ” appears above the setting location, and when the setting location is moved by turning [F2], the value prior to the change is restored.

```
MASK|  ∗
8/15|255.255.255.  0
```

3. Setup

■Setting the gateway

① On the SETUP menu, turn [F1] to display the GW (Gateway) menu.

② Turn [F2] to select the setting location. An asterisk (∗) appears at the setting location.

③ Turn [F3] to set the number, and press the [F3] switch to enter the setting. If the setting is not entered even though it has been changed, " ! " appears above the setting location, and when the setting location is moved by turning [F2], the value prior to the change is restored.

```
GW   |  ∗
9/15|  0.  0.  0.  0
```

■Setting the MAC address

① On the SETUP menu, turn [F1] to display the MAC menu.
The MAC address now appears.

(When the MAC address is "008045448000".)

```
MAC  |
10/15|  008045448000
```

3-8. Other settings

3-8-1. LCD backlight

The LCD backlight can be set to ON or OFF.

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the SYS menu.
Turn [F2], and select ON or OFF for the backlight using the BL item.

3-8-2. Setting the ancillary data

Whether the ancillary data which is superimposed on the vertical blanking period of the input images is to be passed through can be selected.

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the SYS menu.
Turn [F3], and select ON or OFF for the ancillary data using the VANC item.

ON: The ancillary data is passed through.

OFF: The ancillary data is not passed through.

3-8-3. BB signal setup level

The setup level of the BB signal in the internal sync mode can be selected. The level selected takes effect with the 59.94i or 59.94p format. It is fixed at 0 IRE with the 50i or 50p format.

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the SYS menu.
Turn [F4], and select the setup level using the BB item.

0: 0 IRE

7.5: 7.5 IRE

3. Setup

3-9. Status displays

The statuses can be displayed.

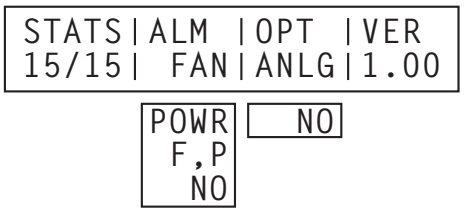
① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the STATS menu.

ALM (alarm): Indicates a fan and/or power supply alarm.
- FAN ➔ Fan alarm
- POWR ➔ Power supply alarm
- F, P ➔ Fan alarm and power supply alarm
- NO ➔ No alarm information

OPT (option): Indicates whether or not an optional board is provided.
- ANLG ➔ The HD analog board has been inserted.
- NO ➔ The HD analog board has not been inserted.

VER (version): Indicates the software version.



3-10. Initialization

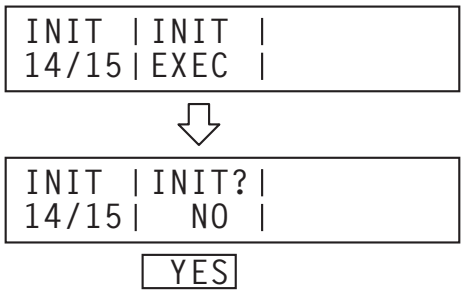
All the settings except the preset memory can be returned to the factory defaults.
(When they are returned, the images in the frame memory will also be initialized.)

① Press the [FUNC] switch to light its indicator, and then press the [SETUP] switch to display the SETUP menu.

② Turn [F1] to display the INIT menu.

③ Press [F2] to initialize the settings. The “INIT?” message appears.

④ To initialize the settings, turn [F2] to select YES, and then press the [F2] switch.
To cancel the initialization, turn [F2] to select NO, and then press the [F2] switch.



4. Setting menu table

A setting is entered when an item displayed ( ) is selected and then the [F1], [F2], [F3] or [F4] switch is pressed. (It will not be entered unless the switch is pressed.)

Menu	Submenu		Parameter 1	Parameter 2	Parameter 3
	Turn F1 to select.		Turn F2 to select.	Turn F3 to select.	Turn F4 to select.
TIME	**BKGD**	Parameter	**TRANSTIME**		**UNIT**
	1/2	Setting range	0 to 13s	0 to 999f	F SEC
		Default value	—	30f	SEC
	KEY	Parameter	**TRANSTIME**		**UNIT**
	2/2	Setting range	0 to 13s	0 to 999f	F SEC
		Default value	—	30f	SEC
WIPE	**BODR**	Parameter	**WIDT**	**SOFT**	**COLR**
	1/5	Setting range	0 to 255	0 to 255	WHT, YLW, CYN GRN, MGT, RED BLE, BLK USR1 to 4
		Default value	0	0	WHT
	USR1(*)	Parameter	**HUE**	**SAT**	**LUM**
	2/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	0	0	100
	USR2(*)	Parameter	**HUE**	**SAT**	**LUM**
	3/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	355	100	7
	USR3(*)	Parameter	**HUE**	**SAT**	**LUM**
	4/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	50	100	29
	USR4(*)	Parameter	**HUE**	**SAT**	**LUM**
	5/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	0	0	0
CBGD	**CBGD**	Parameter	**COLR**	—	—
	1/5	Setting range	WHT, YLW, CYN GRN, MGT, RED BLE, BLK USR1 to 4	—	—
		Default value	WHT		
	USR1(*)	Parameter	**HUE**	**SAT**	**LUM**
	2/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	0	0	100
	USR2(*)	Parameter	**HUE**	**SAT**	**LUM**
	3/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	355	100	7
	USR3(*)	Parameter	**HUE**	**SAT**	**LUM**
	4/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	50	100	29

4. Setting menu table

Menu	Submenu Turn F1 to select.		Parameter 1 Turn F2 to select.	Parameter 2 Turn F3 to select.	Parameter 3 Turn F4 to select.
CBGD	**USR4(*)**	Parameter	**HUE**	**SAT**	**LUM**
	5/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	0	0	0
KEY	**KEY**	Parameter	**TYPE**	**INV**	**PVW**
	1/7	Setting range	SELF LIN	ON OFF	ON OFF AUTO
		Default value	LIN	OFF	AUTO
	K-ADJ	Parameter	**CLIP**	**GAIN**	**DENS**
	2/7	Setting range	0 to 108	0 to 200	0 to 100
		Default value	0	100	100
	FILL	Parameter	**TYPE**	**COLR**	
	3/7 ◇KEY-F Link from switch	Setting range	BUS COLR	WHT, YLW, CYN GRN, MGT, RED BLE, BLK USR1 to 4	
		Default value	BUS	BLE	
	USR1(*)	Parameter	**HUE**	**SAT**	**LUM**
	4/7	Setting range	0 to 359	0 to 100	0 to 108
		Default value	0	0	100
	USR2(*)	Parameter	**HUE**	**SAT**	**LUM**
	5/7	Setting range	0 to 359	0 to 100	0 to 108
		Default value	355	100	7
	USR3(*)	Parameter	**HUE**	**SAT**	**LUM**
	6/7	Setting range	0 to 359	0 to 100	0 to 108
		Default value	50	100	29
	USR4(*)	Parameter	**HUE**	**SAT**	**LUM**
	7/7	Setting range	0 to 359	0 to 100	0 to 108
		Default value	0	0	0
EDGE	**EDGE**	Parameter	**TYPE**	**WIDT**	**COLR**
	1/5	Setting range	OFF BODR DROP SHDW OUTL	0 to 4	WHT, YLW, CYN GRN, MGT, RED BLE, BLK USR1 to 4
		Default value	OFF	2	YLW
	USR1(*)	Parameter	**HUE**	**SAT**	**LUM**
	2/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	0	0	100
	USR2(*)	Parameter	**HUE**	**SAT**	**LUM**
	3/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	355	100	7

4. Setting menu table

Menu	Submenu Turn F1 to select.		Parameter 1 Turn F2 to select.	Parameter 2 Turn F3 to select.	Parameter 3 Turn F4 to select.
EDGE	**USR3(*)**	Parameter	**HUE**	**SAT**	**LUM**
	4/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	50	100	29
	USR4(*)	Parameter	**HUE**	**SAT**	**LUM**
	5/5	Setting range	0 to 359	0 to 100	0 to 108
		Default value	0	0	0
MEM	**PSMEM**	Parameter	**MODE**	**NO.**	
	1/3	Setting range	STOR RECL CLR	∗1 to 10	EXEC ( )
		Default value	STOR	1	—
	PSMEM	Parameter	**XPT**	—	—
	2/3	Setting range	DSBL ENBL	—	—
		Default value	DSBL	—	—
	FMEM	Parameter	**SIG**	**MEM**	**STOR**
	3/3	Setting range	AUX	FMEM	EXEC ( )
		Default value	—	—	—
XPT	**XPTAS** 1/3	Display only	SIG: B 1 2 3 4 5 D XPT: 1 2 3 4 5 6 7		
	XPTAS	Parameter	**XPT**	**SIG**	—
	2/3	Setting range	1 to 7	IN1 to 5, DVI BLK, CBGD, CBAR, FMEM	—
		Default value	1	BLK	—
			2	IN1	—
			3	IN2	—
			4	IN3	—
			5	IN4	—
			6	IN5	—
			7	DVI	—
	XPTSW	Parameter	**TIMG**	—	—
	3/3	Setting range	ANY F1 F2	—	—
		Default value	ANY	—	—
FRZ	**FRZ** 1/2	Display only	FRZ: ∗∗∗∗∗∗∗ XPT: 1 2 3 4 5 6 7		
	FRZ	Parameter	**SIG**	—	**FRZ**
	2/2	Setting range	IN1 to 5, DVI	—	Toggling between ON and OFF ( )
		Default value	IN1 to 5, DVI	—	OFF

4. Setting menu table

Menu	Submenu Turn F1 to select.		Parameter 1 Turn F2 to select.	Parameter 2 Turn F3 to select.	Parameter 3 Turn F4 to select.
SETUP	**IN1–5**	Parameter	**SIG**	**MODE**	**GAIN**
	1/15	Setting range	IN1 to 5	SDI ANLG	–30 to 30
		Default value	IN1 to 5	SDI ANLG	— 0
	DVIIN	Parameter	**MODE**	**SCAL**	—
	2/15	Setting range	DIG ANLG	NORM FULL	—
		Default value	DIG	NORM	—
	FS	Parameter	**SIG**	**FS**	—
	3/15	Setting range	IN1 to 5	ON OFF	—
		Default value	IN1 to 5	ON	—
	FORMT	Parameter	**MODE**	—	—
	4/15	Setting range	∗1080/59i 1080/50i 720/59p 720/50p 480/59i 576/50i	—	EXEC ( )
		Default value	1080/59i	—	—
	REF	Parameter	**SYNC**	**GL**	—
	5/15	Setting range	∗BBST BBAD TRI INT	∗ —	EXEC ( )
		Default value	BBST	—	—
	OUPHS	Parameter	**SYS**	**HPHS**	**VPHS**
	6/15	Setting range	0H 1H	–1320 to 1319	–100 to 100
		Default value	1H	0	0
	IP	Setting range	Cursor movement	0 to 255	
	7/15	Default value	192.168.0.10		
	MASK	Setting range	Cursor movement	0 to 255	
	8/15	Default value	255.255.255.0		
	GW	Setting range	Cursor movement	0 to 255	
	9/15	Default value	0.0.0.0		
	MAC	Display only	12-digit address display		
	10/15	Default value	—		
	BUS	Parameter	**MODE**	—	—
	11/15	Setting range	A/B P/P (PGM/PST)	—	—
		Default value	P/P	—	—

4. Setting menu table

Menu	Submenu		Parameter 1	Parameter 2	Parameter 3
	Turn F1 to select.		Turn F2 to select.	Turn F3 to select.	Turn F4 to select.
SETUP	**SYS**	Parameter	**BL**	**VANC**	**BB**
	12/15	Setting range	ON OFF	ON OFF	0 7.5
		Default value	ON	OFF	7.5
	DVIPH	Parameter	**CKPH**	**HPOS**	**VPOS**
	13/15	Setting range	–16 to 15	–100 to 100	–100 to 100
		Default value	0	0	0
	INIT	Parameter	**INIT**	—	—
	14/15	Setting range	EXEC ( )		
	STATS	Parameter	**ALM**	**OPT**	**VER**
	15/15	Display only	FAN POWR F, P NO	ANLG NO	Version number

*** The same USR1 to USR4 parameters are used for the WIPE menu, CBGD menu, KEY menu and EDGE menu.**